

**PLAN FOR CONDUCTING WRITTEN TESTS FOR THE FOLLOWING NON-FACULTY POSTS OF NIT MANIPUR:**

TOTAL MARKS: 100

TIME ALLOTTED: First 1 hour for Common Aptitude Test (Part A & B) and next ½ hour for Subject Knowledge (Part C)

NO. OF QUESTIONS: 30 for Common Aptitude Test (Part A & B) and 20 for Subject Knowledge (Part C)

QUESTION TYPE: OBJECTIVE

Sl. No.	Post	No. of Post	Part A: General Knowledge (30 marks)	Part B: Aptitude Test (30 marks)	Part C: Subject Knowledge (40 marks)
1	Superintendent	1	Common for all	Common for all	Central Govt. Rules mainly focussed on Establishment matters
2	Accountant	1	Common for all	Common for all	Accountancy & Central Govt. Rules mainly focussed on financial matters
3	Technical Assistant (Systems)	1	Common for all	Common for all	Computer Science mainly focussed on Networking and System Administration, Website Management
4	Nurse	1	Common for all	Common for all	Basic Nursing concepts
5	Multitasking	2	Common for all	Common for all	Nil



## **PART A: GENERAL STUDIES (common for all)**

Questions are designed to test the candidate's general awareness of the environment around him and its applications to society. Questions are also designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspect as may be expected of an educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to History, culture, Geography, Economic Scene, General Policy and Scientific Research, Computer Basics/ Knowledge

## **PART B: APTITUDE TEST (common for all)**

### **General Intelligence**

It would include questions of both verbal and non-verbal type. The test will include questions on Semantic Analogy, Symbolic operations, Symbolic/ Number Analogy, Trends, Figural Analogy, Space Orientation, Semantic Classification, Venn Diagrams, Symbolic/ Number Classification, Drawing inferences, Figural Classification, Punched Hole/ patterned – folding and unfolding, Semantic Series, Figural Pattern – folding and completion, Numbers Series, Embedded figures, Figural Series, Critical Thinking, Problem Solving, Emotional Intelligence, Word Building, Social Intelligence, Coding and De-coding, other sub- topics, if any numerical operations

### **English Language**

Spot the error, Fill in the Blanks, Synonyms/Homonyms, Antonyms, Spelling/Detecting mis-spelt words, Idioms and Phrases, one word substitution, improvement of sentences, Active passive voice of verbs, conversion into direct/ indirect narration, shuffling of sentence parts, shuffling of sentences in a passage, close passage, comprehension passage

### **Quantitative Aptitude**

#### **Arithmetic**

Numerical Reasoning: Number, ranking & Time sequence test, directions & distances, logical Venn Diagrams, arithmetic reasoning, blood relations, cubes & dice, coding and decoding test, inserting the missing characters, analytical reasoning, logical reasoning.

Fundamental Arithmetical Operations: Percentages, Ratio and Proportion, Square roots, averages, Interest (Simple and Compound), Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and Distance, Time and Work



## **PART C: SUBJECT KNOWLEDGE**

### **1. Superintendent**

Central Government Rules and Procedures:

- (a) Establishment matters covering creation of post, age relaxation for appointments, recruitment through employment exchange, recruitment by direct recruitment/ absorption/ deputation, probation on appointment, ad hoc appointment/ promotions, casual labour, medical examination on first appointment and domicile
- (b) Concessions in appointment covering post based roster, SC and ST, Socially and Educationally Backward Classes, Persons with disabilities, Ex- servicemen, sportsmen and compassionate appointments
- (c) General Financial Rules – in relation to procurement and disposal of goods, procurement of services, contract management
- (d) Fundamental Rules and Supplementary Rules
- (e) TA and LTC Rules
- (f) CCS (Medical Attendance Rules)
- (g) CCS (Leave) Rules
- (h) CCS (Joining Time) Rules
- (i) General Office Management covering Rules for display of National Flag, Matyrs' Day, Attendance and Punctuality, Holidays of Govt. Offices, Noting and Drafting, Forms and Procedure of Communication, Secret and Confidential Records, Records Management, Security Instructions
- (j) Right to Information Act 2005 and Right to Information (regulation of Fee and Cost) Rules

### **2. Accountant**

**a) Accountancy :** Maintenance of Cash Book, Preparation of Bank Reconciliation Statement, Posting of Ledger Accounts, Preparation of Trial Balance and Final Accounts, Principles of Auditing , Depreciation

**b) Tally:** Features of Tally, Ledgers and Group creations, Feeding Vouchers, Cash, Bank, Journal & Adjustment Entries, Bank Reconciliation, Trial Balance, Financial Statements & balance Sheet

**c) Knowledge of Central Government Rules and Procedures:**

- (a) Income Tax and Service Tax Rules
- (b) General Financial Rules
- (c) TA and LTC Rules
- (d) CCS (Pension) Rules and New Pension Scheme
- (e) Provident Fund Rules
- (f) Gratuity Rules
- (g) CCS (Joining Time) Rules
- (h) Contingent expenditure



### 3. Technical Assistant(Systems)

#### Basics of Information Technology

Information Technology –its concept and scope. Computers for information storage, information seeking, information processing and information transmission. Elements of computer system, computer hardware and software; data –numeric data, alphanumeric data; contents of a program, processing. Computer organization, block diagram of a computer, CPU, memory. Input devices; keyboard, mouse etc; output devices; VDU and Printer, Scanner, Plotter. 6. Electrical requirements, inter-connections between units, connectors and cables. Secondary storage; magnetic disks – tracks and sectors, optical disk (CD and DVD Memory), primary and secondary memory: RAM, ROM, PROM etc., Capacity; device controllers, serial port, parallel port, system bus. Exercises on file opening and closing; memory management; device management and input –output (I/O) management with respect of windows. Installation concept and precautions to be observed while installing the system and software. Introduction about Operating Systems such as MS - DOS and Windows. Special features, various commands of MS word and MS-Excel. About the internet –server types, connectivity (TCP/IP, shell); applications of internet like:e-mail and browsing. Various Browsers like www (World wide web); hyperlinks; HTTP (Hyper Text Transfer Protocol); FTP (File Transfer Protocol)  
Basics of Networking –LAN, WAN, Topologies

#### Operating System

Basic features of OS, I/O devices, Single user and multi-user OS, I/O utilities, Multitasking OS, Various parts of OS, Loading of OS, Boot strapping, Different types of OS, Shell, File system, Software tools, Program translation sequence, Compilers & interpreters, Linkers, Loaders, Assemblers, Fundamentals of DOS and Windows 7, Process concept, Process scheduling, Types of schedulers, Scheduling and performance criteria, Scheduling algorithms, Inter process communication, Mutual exclusion, Semaphores, Critical section, Dead locks File concept, Directories, Disk organization, Disk space management methods, Linked list, Bit map, Disk allocation methods, Contiguous allocation, Non.-contiguous allocation, Disk scheduling, Different scheduling algorithms, File protection, Passwords access groups.

**Database:** ER-model, Relational Model, Database design, Query Language (SQL), transactions and concurrency control. Relational Database Design: 1st, 2nd, 3rd, BCNF, 4th, 5th Normal forms. Transactions - Properties (ACID), States, Concurrent executions. Concurrency control- lockbased protocols -Locks. Data Definition in SQL: Data types, creation, Insertion, viewing, updation, deletion of tables, modifying the structure of tables, renaming, dropping of tables. Data constraints I/O constraints. Primary key, foreign key, Unique key constraints. Business rule constraint, Null, not null, check integrity constraints, Defining different constraints on table, ALTER TABLE Command

**Computer Networks:** ISO/OSI stack, LAN technologies (Ethernet, Token ring), Flow and error control techniques, Routing algorithms, Congestion control, TCP/UDP and sockets, IP(v4), Application layer protocols (ICMP, DNS, SMTP, POP, FTP, HTTP); Basic concept of hubs, switches, gateways, routers. Network security – basic concepts of public key and private key cryptography, digital signature, firewall.

**Web technologies:** HTML (basic to advance knowledge of HTML), XML, basic concept of client-server computing. Overview of ASP.NET framework, Understanding ASP.NET Controls, Applications, Web servers, installation of IIS, Web forms, web form controls - server controls, client controls, web, forms & HTML, Adding controls to a web form, Buttons, Text Box, Labels, Checkbox, Radio Buttons, List Box, etc, Running a web Application, creating a multiform web project.

#### **4.Nurse**

##### **Community Health Nursing**

Introduction, Health problems in India, National health policy, Health services organisations, National planning, Achievements, Five year plans, Social welfare services, Communicable, disease problems, Reproductive and child health programme, National programme for prevention of blindness. Universal immunization programme, National family welfare, programme, 20-point programme, Qualities and functions of a public health nurse, Family health services, Maternal and child health, Home visiting, Nutritional problems.

##### **Mental health nursing**

Introduction, Understanding of patient, Characteristics of mental health, Mental disorder, Psychoses, Paranoia, Epilepsy, Alcoholic addiction and drug abuse, Nursing care of severely retarded, Learning disability, Attention deficit and hyperactive disorder, Conduct disorder, Autism or other pervasive development disorder, Education and mental health, Mental health services.

##### **Midwifery**

Introduction to midwifery, Maternal physiological changes during pregnancy, Diagnosis of pregnancy, Normal pregnancy, Personal hygiene, High risk pregnancy, Nutrition in pregnancy, Weight gain in pregnancy, Process of labour, Changes taking place during stages of labour, The newborn infant, Care of normal newborn, Family welfare, Reproductive child health.

